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CHIMERIC CHAINS FOR RECEPTOR-ASSOCIATED
SIGNAL TRANSDUCTION PATHWAYS



ABSTRACT OF THE DISCLOSURE

Chimeric proteins and DNA encoding chimeric proteins are provided, where the chimeric proteins are characterized by an extracellular domain capable of binding to a ligand in a non-MHC restricted manner, a transmembrane domain and a cytoplasmic domain capable of activating a signaling pathway. The extracellular domain and cytoplasmic domain are not naturally found together. Binding of ligand to the extracellular domain results in transduction of a signal and activation of a signaling pathway in the cell, whereby the cell may be induced to carry out various functions relating to the signalling pathway. A wide variety of extracellular domains may be employed as receptors, where such domains may be naturally occurring or synthetic. The chimeric DNA may be used to modify lymphocytes as well as hematopoietic stem cells as precursors to a number of important cell types.